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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/800,056	03/05/2001	Yutaka Sato	SONYJP 3.0-755	3522

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EXAMINER

FIGUEROA, FELIX O

ART UNIT	PAPER NUMBER
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2833

MAIL DATE	DELIVERY MODE
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02/02/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/800,056	SATO ET AL.	
	Examiner	Art Unit	
	FELIX O. FIGUEROA	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5,12,16,33,39,41 and 43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5,12,16,33,39,41 and 43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 5, 12, 16, 33, 39, 41 and 43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed does not provide basis for "the center audio signal output terminal is arranged in between the front left audio signal output terminal and the rear left audio signal output terminal". Please note that the disclosure does not show or disclose the center terminal located between two left terminals.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 16, 39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gefvert (US 5,850,457) in view of Ruzicka (US 6,118,876), Lee (US

5,589,718), Siems et al. (US 5,470,253), Glover (3,824,524) and Applicant's Admitted Prior Art (AAPA) of Figs. 12-14.

Gefvert discloses a multi-channel audio system comprising an electronic apparatus (100) having a back panel with at least four audio signal output terminals (see Fig. 8B) for a plurality of channels, the at least four audio signal output terminals including a front right audio signal output terminal, a rear right audio signal output terminal, a front left audio signal terminal, a rear left audio signal output terminal and a center audio signal output terminal (see Fig. 8B); a plurality of speakers (102, 104, 106, 108); and a plurality of connecting cable members (see Fig. 8B), each incorporating a pair of conductor members bearing a pair of polarities and sheathed by one of a plurality of insulating sheathing members, all of the audio signal output terminals corresponding to the left channels being arranged to the right of all of the audio signal output terminals corresponding to the right channels (see Fig. 8B), the speakers being arranged corresponding to the plurality of channels. Gefvert also discloses a name of the corresponding output channel being displayed surrounding the respective output terminal (see Fig.8B). Please note that Gefvert discloses the output terminals corresponding to the left channels being arranged to the right of output terminals corresponding to the right channels when viewed from the front of the receiver. Gefvert also discloses each of the left audio signal output terminals arranged to the same side of the right audio signal output terminals.

To the extent that Gefvert does not teach the output terminals corresponding to the positions of the speakers as viewed from the rear portion of the electronic

Art Unit: 2833

apparatus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the position of the output terminals to correspond to the position of the speakers (left and right sides) as viewed from the rear of the apparatus, as taught by AAPA, in order to reduce wire tangling. Please note that modifying Gefvert, as taught by AAPA, results in all of the audio signal output terminals corresponding to the left channels being arranged to the right of all of the audio signal output terminals corresponding to the right channels as viewed from the rear of the apparatus; and the rear left audio signal output terminal is arranged to the right of both of the front right audio signal output terminal and the rear right audio signal output terminal on the back panel as viewed when facing the rear portion of the electronic apparatus.

Gefvert discloses substantially the claimed invention except for the plurality of colors on the signal output terminals. Ruzicka discloses (in col.7 lines 28-33) the use of an audio system having audio signal output terminals being distinguished by one of a plurality of colored labels for enabling the plurality of channels to be discernible; a plurality of connecting cable members distinguished by one of the plurality of colors corresponding to a color distribution of the audio signal output terminals; and the speakers being distinguished by corresponding colors to facilitate installation process. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the terminals and cable members of Gefvert with a plurality of colors, as taught by Ruzicka, to facilitate installation process.

Gefvert, as modified by Ruzicka, discloses substantially the claimed invention except for the colored mark displayed surrounding the output terminal. Lee ('718) teaches the use of colored indicia, as a colored mark surrounding a respective output terminal (col.2 lines 26-30). This feature ensures a clear view of the colored mark on the output terminal. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the colored mark surrounding the output terminals, as taught by Lee, to ensure a clear view of the mark.

Gefvert, as modified by Ruzicka, discloses substantially the claimed invention except for the use of contractile tubes. Siems teaches the use of thermally contractile tubes of different colors (col.3. lines 14-18) secured to cable members to facilitate installation and connection. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use thermally contractile tubes of different colors secure to cable members, as taught by Siems, to facilitate installation and connection. To the extent that AAPA does not discloses the use of black and white colored marks, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use black and white colored marks on the tubes to identify the polarities, in order to provide easily distinguishable marks and to match the polarities in the back panel and speakers.

Gefvert, as modified, discloses substantially the claimed invention except for the connector structure of the cable. Glover discloses a connector using a connecting cable member (5) having two conductor portions having a pair of polarities and an insulating sheathing member, one end of the connecting cable member conforming to a structure

Art Unit: 2833

of a plug connector (1) incorporating two conductor members (27) connected to the two conductor portions; a socket connector (3) coupled with the plug connector and provided in one of a first or second apparatus, the socket connector being provided with a pair of connecting pins (35) bearing the pair of polarities; and position controlling means (see Fig.7); the plug connector being provided with a pair of coupling holes (27); and position controlling means coupling portion (see Fig.6) to ensure correct connection. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a connector structure, as taught by Glover, to ensure correct connection.

Glover discloses substantially the claimed invention except for the second slit of shorter length. However, it would have been an obvious matter of to one skill in the art at the time the invention was made to add a second slit of shorter length in order to reduce the amount of material used, and since applicant has not disclosed that the second slit solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well without the slit. Absent any convincing showing of the criticality of the design, this particular design is nothing more than the inventor's choice without thereby departing from the scope of the invention. *In re Dailey*, 149 USPQ 47 (CCPA 1976). (see further discussion in Response to Arguments).

Gefvert, as modified, discloses substantially the claimed invention except for the specific arrangement of the output terminals, i.e. the top and bottom relationship. It would have been obvious to one having ordinary skill in the art at the time the invention

Art Unit: 2833

was made to use different positioning arrangements for the output terminals as a matter of preference, and since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Gefvert, as modified, discloses substantially the claimed invention except for a display of the pair of polarities. AAPA teaches displaying the pair of polarities in order to facilitate proper connection. It would have been obvious to one of ordinary skill in the art at the time the invention was made to display the pair of polarities, as taught by AAPA, to facilitate proper connection. To the extent that AAPA does not disclose the use of black and white colored marks, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use black and white colored marks to identify the polarities, in order to provide easily distinguishable marks.

Regarding claim 16, Gefvert discloses a multi-channel audio system comprising an electronic apparatus (100) provided on a back panel with at least four audio signal output terminals (see Fig.8B) for a plurality of channels, the at least four audio signal output terminals including a front right audio signal output terminal, a rear right audio signal output terminal, a front left audio signal terminal, a rear left audio signal output terminal and a center audio signal output terminal (see Fig. 8B); a plurality of speakers (102,104,106,108); and a plurality of connecting cable members (see Fig.8B), each incorporating a pair of conductor members bearing a pair of polarities and sheathed by one of a plurality of insulating sheathing members, each of the audio signal output terminals being arranged corresponding to positions of the plurality of speakers, the

Art Unit: 2833

speakers being arranged corresponding to the plurality of channels, and all of the audio signal output terminals corresponding to the left channels being arranged to the right of all of the audio signal output terminals corresponding to the right channels (see Fig. 8B). Gefvert also discloses a name of the corresponding output channel being displayed surrounding the respective output terminal (see Fig.8B). Please note that Gefvert discloses the output terminals corresponding to the left channels being arranged to the right of output terminals corresponding to the right channels when viewed from the front of the receiver. Gefvert also discloses each of the left audio signal output terminals arranged to the same side of the right audio signal output terminals.

To the extent that Gefvert does not teach the output terminals corresponding to the positions of the speakers as viewed from the rear portion of the electronic apparatus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the position of the output terminals to correspond to the position of the speakers (left and right sides) as viewed from the rear of the apparatus, as taught by AAPA, in order to reduce wire tangling. Please note that modifying Gefvert, as taught by AAPA, results in all of the audio signal output terminals corresponding to the left channels being arranged to the right of all of the audio signal output terminals corresponding to the right channels as viewed from the rear of the apparatus; and the rear left audio signal output terminal is arranged to the right of both of the front right audio signal output terminal and the rear right audio signal output terminal on the back panel as viewed when facing the rear portion of the electronic apparatus.

Gefvert discloses substantially the claimed invention except for the plurality of colors on the signal output terminals. Ruzicka discloses (in col.7 lines 28-33) the use of an audio system having audio signal output terminals being distinguished by one of a plurality of colored labels for enabling the plurality of channels to be discernible; a plurality of connecting cable members distinguished by one of the plurality of colors corresponding to a color distribution of the audio signal output terminals; and the speakers being distinguished by corresponding colors to facilitate installation process. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the terminals and cable members of Gefvert with a plurality of colors, as taught by Ruzicka, to facilitate installation process.

Gefvert, as modified by Ruzicka, discloses substantially the claimed invention except for the colored mark displayed surrounding the output terminal. Lee teaches the use of colored indicia, as a colored mark surrounding a respective output terminal (col.2 lines 26-30). This feature ensures a clear view of the colored mark on the output terminal. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the colored mark surrounding the output terminals, as taught by Lee, to ensure a clear view of the mark.

Gefvert, as modified by Ruzicka, discloses substantially the claimed invention except for the use of contractile tubes. Siems teaches the use of thermally contractile tubes of different colors secure to cable members to facilitate installation and connection. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use thermally contractile tubes of different

Art Unit: 2833

colors secure to cable members, as taught by Siems, to facilitate installation and connection. To the extent that AAPA does not disclose the use of black and white colored marks, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use black and white colored marks on the tubes to identify the polarities, in order to provide easily distinguishable marks and to match the polarities in the back panel and speakers.

Gefvert, as modified, discloses substantially the claimed invention except for the connector structure of the cable members. Glover discloses a connector structure on a cable (see discussion of Glover regarding claim 5) to ensure correct connection. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a connector structure, as taught by Glover, to ensure correct connection.

Glover discloses substantially the claimed substantially the claimed invention except for the second slit of shorter length. However, it would have been an obvious matter of to one skill in the art at the time the invention was made to add a second slit of shorter length in order to reduce the amount of material used, and since applicant has not disclosed that the second slit solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well without the slit. Absent any convincing showing of the criticality of the design, this particular design is nothing more than the inventor's choice without thereby departing from the scope of the invention. *In re Dailey*, 149 USPQ 47 (CCPA 1976). (see further discussion in Response to Arguments).

Ruzicka discloses the use of labels (col. 7 line 31). It appears that the use of label, as defined by *The American Heritage® Dictionary of the English Language, Fourth Edition* as "An item used to identify something or someone, as a small piece of paper or cloth attached to an article", includes the use of sheets. Nonetheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the distinguishing colors by one of different known methods, such as using colored labels and/or sheets in order to provide easy identification.

Gefvert, as modified, discloses substantially the claimed invention except for the specific arrangement of the output terminals, i.e. the top and bottom relationship. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use different positioning arrangements for the output terminals as a matter of preference, and since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse, 86 USPQ 70.*

Gefvert, as modified, discloses substantially the claimed invention except for a display of the pair of polarities. AAPA teaches displaying the pair of polarities in order to facilitate proper connection. It would have been obvious to one of ordinary skill in the art at the time the invention was made to display the pair of polarities, as taught by AAPA, to facilitate proper connection. To the extent that AAPA does not disclose the use of black and white colored marks, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use black and white colored marks to identify the polarities, in order to provide easily distinguishable marks.

Regarding claims 39 and 41, Glover discloses each of the plug connector structure and the socket connector structure has an asymmetric cross section such that one polarity thereof has a shape different from that of the other polarity.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gefvert, Ruzicka, Lee ('718), Siems, Glover, and AAPA, and further in view of and Lee (US 5,984,717).

Glover discloses substantially the claimed invention except for plug connectors at both ends of the cable. Lee ('717) teaches a connector comprising a cable (22) having plug connectors at both ends to provide uniformity and facilitate the connection process. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a plug connector at both ends of the cable member of Glover, as taught by Lee, to provide uniformity and facilitate the connection process.

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gefvert in view of AAPA and Glover.

Regarding claim 33, Gefvert discloses multi-channel audio system comprising: an electronic apparatus (100) having a back panel with at least four audio signal output terminals for a plurality of channels (Fig. 8B), said at least four audio signal output terminals including a front right audio signal output terminal for a front right channel, a rear right audio signal output terminal for a rear right channel, a front left audio signal output terminal for a front left channel, and a rear left audio signal output terminal for a

Art Unit: 2833

rear left channel, and a center audio signal output terminal (see Fig. 8B), said back panel being located on a rear portion of the electronic apparatus (Fig. 8B); a plurality of speakers (102,104,106,108) for generating acoustic output for each of said plurality of channels in a form of audio signals output from said audio signal output terminals; and a plurality of connecting cable members, each of said plurality of connecting cable members incorporating a pair of conductor members for connecting said electronic apparatus to said plurality of speakers.

To the extent that Gefvert does not teach the output terminals corresponding to the positions of the speakers as viewed from the rear portion of the electronic apparatus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the position of the output terminals to correspond to the position of the speakers (left and right sides) as viewed from the rear of the apparatus, as taught by AAPA, in order to reduce wire tangling. Please note that modifying Gefvert, as taught by AAPA, results in all of the audio signal output terminals corresponding to the left channels being arranged to the right of all of the audio signal output terminals corresponding to the right channels as viewed from the rear of the apparatus; and the rear left audio signal output terminal is arranged to the right of both of the front right audio signal output terminal and the rear right audio signal output terminal on the back panel as viewed when facing the rear portion of the electronic apparatus.

Gefvert, as modified, discloses substantially the claimed invention except for the specific arrangement of the output terminals, i.e. the top and bottom relationship. It

would have been obvious to one having ordinary skill in the art at the time the invention was made to use different positioning arrangements for the output terminals as a matter of preference, and since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Gefvert, as modified, discloses substantially the claimed invention except for the connector structure of the cable. Glover discloses a connector using a connecting cable member (5) having two conductor portions having a pair of polarities and an insulating sheathing member, one end of the connecting cable member conforming to a structure of a plug connector (1) incorporating two conductor members (27) connected to the two conductor portions; a socket connector (3) coupled with the plug connector and provided in one of a first or second apparatus, the socket connector being provided with a pair of connecting pins (35) bearing the pair of polarities; and position controlling means (see Fig.7); the plug connector being provided with a pair of coupling holes (27); and position controlling means coupling portion (see Fig.6) to ensure correct connection. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a connector structure, as taught by Glover, to ensure correct connection.

Glover discloses substantially the claimed substantially the claimed invention except for the second slit of shorter length. However, it would have been an obvious matter of to one skill in the art at the time the invention was made to add a second slit of shorter length in order to reduce the amount of material used, and since applicant has not disclosed that the second slit solves any stated problem or is for any particular

purpose and it appears that the invention would perform equally well without the slit. Absent any convincing showing of the criticality of the design, this particular design is nothing more than the inventor's choice without thereby departing from the scope of the invention. *In re Dailey*, 149 USPQ 47 (CCPA 1976).

Regarding claim 43, Glover discloses each of the plug connector structure and the socket connector structure has an asymmetric cross section such that one polarity thereof has a shape different from that of the other polarity.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection, as applied.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FELIX O. FIGUEROA whose telephone number is (571)272-2003. The examiner can normally be reached on Mon.-Fri., 10:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Renee Luebke can be reached on (571) 272-2009. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2833

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/Felix O. Figueroa/
Primary Examiner
Art Unit 2833